

# 1. Smoking Topography

[Same as lab-based CReSS]

(Volume, Duration, Count, IPI, Peak Flow,

[NEW: Avg Flow

Time of Peak

Time to First Puff

Time to Removal

Temperature]

## 1.1. Compensatory Behavior

## 1.2. Other Behavioral Changes

# 2. The CReSSmicro Device

## 2.1. Overview

2.1.1. Display, buttons, LED, buzzer

2.1.2. Mouthpiece and bracket (removable for cleaning)

2.1.3. Data port and cable

2.1.4. Battery compartment

## 2.2. Features of Interest

2.2.1. No "on/off" switch

2.2.2. Storage capacity

2.2.3. Battery life

2.2.4. Date and time

2.2.5. Self-zeroing at every cigarette-in

## 2.3. Participant Instructions

2.3.1. Holding the device properly

2.3.2. Inserting a cigarette properly

2.3.3. Display, buttons, LED not used at this time

2.3.4. One beep at Cig-In, Three beeps at Cig-Out (if not heard, note time & date)

2.3.5. Do not drop or get the unit wet

▷ Remove cig before putting it out

▷ Measuring the "lighting puff"

- 2.3.6. Do not share the device with others (non-lab studies)
- 2.3.7. Do not open unit or battery compartment
- 2.3.8. Do not zap with static electricity

## **2.4. Staff Instructions**

- 2.4.1. Replacing the battery
- 2.4.2. Do not leave serial cable installed longer than necessary (Audible Confirmation)
- 2.4.3. Remove battery if not in active use
- 2.4.4. Cleaning the mouthpiece (alcohol or bleach)
- 2.4.5. Assembly and disassembly

## **3. The CReSShost Software**

### **3.1. Overview**

- 3.1.1. Requires an open 9-pin serial port for CReSSmicro
- 3.1.2. "Tree view" of devices to choose from

### **3.2. Communications**

- 3.2.1. Audible feedback for cable in/out
- 3.2.2. Assigning a serial port
- 3.2.3. Authentication (organization ID)
- 3.2.4. Device must have battery installed for communications

### **3.3. The Finder**

- 3.3.1. Locate a connected device
- 3.3.2. Serial number used for tracking

### **3.4. The Device Dashboard**

### 3.4.1. Preparing a device for use

#### 3.4.1.1. Synchronizing the date and time

3.4.1.2. Test puffs (printing) - these are never stored on device

#### 3.4.1.3. Checking battery level

### 3.4.2. Downloading measures

#### 3.4.2.1. Selecting Participant ID, Staff ID, and Study ID

#### 3.4.2.2. Selecting the download file/folder (based on Participant ID)

#### 3.4.2.3. Data storage and management (new data are always appended)

#### 3.4.2.4. Hierarchical view of the measures (printing) (only when displayed)

#### 3.4.2.5. Erasing measures from the device (permanent)

#### 3.4.2.6. A look at the measures

3.4.2.6.1. Cigarette-level data

3.4.2.6.2. Puff-level data (a word about IPI on Puff #1)

▷ Back up your data!

▷ Text file versus Excel file (don't mix them!)

### 3.4.3. Configuration settings

#### **3.4.3.1. Cigarette abandon timer**

#### **3.4.3.2. PuffCleanUp (data cleaning)**

### **3.5. Upgrading the Device Software**

#### 3.5.1. Emailed or downloadable upgrades

#### 3.5.2. Upgraded via data cable

### **3.6. The List Manager**

#### 3.6.1. Manage various lists maintained by the software

#### 3.6.2. Can delete devices but not add new ones

#### 3.6.3. Printing the lists for record keeping

#### 3.6.4. Does not affect data already downloaded

## **4. Troubleshooting**

### **4.1. Communications**

#### 4.1.1. Make sure data cable seated well in device

### **4.2. Device errors**

#### 4.2.1. Rapid buzzer blasts, error message on LCD (for 20 seconds)

#### 4.2.2. Call us

### **4.3. Software (PC) errors**

#### 4.3.1. Fatal error report on printer

#### 4.3.2. Call us